





*of them from the Author* (5)

NOTICE  
OF THE  
MOLLUSCUM CONTAGIOSUM.

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THE remarkable disorder which was first described by Bateman under the name of *Molluscum Contagiosum* appears to be among the rarest of cutaneous diseases. Willan, Alibert, Rayer, Bielt, Cazenave, and Schedel appear never to have fallen in with a single case of it; and, indeed, the only original notices of it on record are those of Bateman and Carswell; the latter of whom communicated to Cazenave and Schedel some particulars of five cases which had come to the knowledge of Dr Thomson, the distinguished Professor of Pathology in the University of this city. Bateman appears to have seen only five cases of the disease, though two others are noticed as having come to his knowledge in connection with the history of these. From the accounts of the genus *Molluscum*, published in 1840, by M. Maximilien-Maurice Jacobovics, it would appear that the species to which the following particulars refer continued unknown to the French dermatologists; and I have not been able to trace any notice of it in such German works as I have had access to, which treat of cutaneous disorders.

In July of 1834 I had an opportunity of seeing four cases of the *Molluscum Contagiosum* among children of poor parents residing in Jamaica Street of this city. Three of these cases were children of the same family, and the fourth was a child of a neighbour in the habit of associating with the others. Though the circumstances are calculated to excite a suspicion that the disease was communicated from one to another of these by contagion, I could not trace the transmission so conclusively as Bateman and Thomson have done. One of the three children had exhibited the disorder six months previously, but from what source was unknown. A second became affected a month later; and the third only a fortnight before the date of my attendance.

The child first affected was 18 months old when the molluscum appeared. The tubercles presented themselves first on the left upper eyelid, and successively affected the other eyelids and the face. When I saw the child, there were about a dozen tubercles on the face in various stages of development, and one only elsewhere,—on the right ankle. From the account I received from the mother of the progress and duration of the tubercles, it appeared that they

differed much in these respects. Two had existed on the right upper eyelid for nearly six months; while several which had appeared on the hands had run their whole course in about a month. This diversity was doubtless dependent on the degree of exposure of the tubercles in the different situations to injury or irritation, for their disappearance, as stated originally by Bateman, is owing to inflammation, in consequence of which they suppurate slowly, presenting ultimately the characters of a prominent pustule.

It does not appear that the tubercles are necessarily numerous. A twin brother of the child to whom I have just referred, though affected with the disease five months before I saw him, never had more than two tubercles, one on the leg, and another on the shoulder. These had not then become inflamed. At the time when I saw the other two children, each had but one tubercle, but I did not learn the subsequent history of the disease in them. The twin children were very unhealthy. When committed to my care, the child who was the most affected with the tubercles had a tumid belly, emaciated limbs, was subject to diarrhœa, and had a squalid appearance. The other was not in so bad a state at that time; yet both continued sickly; were in the following year affected with *psoriasis gyrata*; and ultimately died within a few hours of each other, with the symptoms of acute hydrocephalus. I had not an opportunity of watching the course of the molluscum until its final disappearance in these children; but I ascertained, nine months after they first came under my care, that the disease had disappeared, and that its duration had extended to twelve or thirteen months. The description and plate contained in Bateman's continuation of Willan's treatise on cutaneous diseases correspond in every essential particular with what was presented in the cases to which I have been referring.

Lately a fifth case of *molluscum contagiosum* has fallen under my notice, and has afforded me an opportunity of examining the structure of the tubercles, and the microscopic characters of the atheromatous matter which they contain. I am enabled by Dr Paterson of Leith to mention the existence, at the moment of my writing this, of three other cases which have recently occurred in his practice, so that now twenty cases of this curious disorder are on record.

Of the following case I could obtain no history, either of the source of the disease or of its duration. The boy appears to have been an orphan, and was removed from the workhouse to the Royal Infirmary, where he fell under my care.

Philip Walker, aged 8, admitted April 17th 1841.

This patient can give no exact account of the history of his case, but on admission he presents the following appearances.

His head is covered in several places with large prominent scabs, varying in size from that of a sixpence to that of a half-crown.

On the lower part of the abdomen, the penis and scrotum, and about six inches in extent of the inner surface of both thighs, there are seen from three to four dozen tubercles, varying in size from a millet seed to a pea. They are in general of a round form, but a few of them appear flattened, as if from pressure. In the majority the point of attachment to the skin is distinctly smaller than the remoter part, still it cannot be called a peduncle. At the apex of each tubercle, a small

dark-coloured point is seen, which marks the seat of an opening communicating with its interior, and exuding a milky-like fluid on pressure. On the left side posteriorly, about a finger's breadth from the spine, and at the lower part of the chest, there is a soft swelling an inch and a-half in length from above downwards, and an inch and a-quarter in breadth, of an elliptical form. In the centre of this swelling there is a smaller and gentler elevation, of a dull purplish colour, with vascular ramifications, in the apex of which there is a small rounded aperture, from which a thickish matter, closely resembling finely ground rice boiled, can be squeezed. There is no pain in the swelling; he says he has noticed it for many months, and that it was at one time much smaller. On the right arm, four tubercles, similar to those found on the pubis, exist, and ten are seen on the left arm. At the bend of the right knee, and upon the inner ankle of the left foot, a small superficial ulceration exists, which in the latter situation is partly covered with a dark-coloured scab. The feet are œdematous; the skin over them is red, and they are tender on pressure. The abdomen is very tense, and yields a tympanitic sound on percussion. He has frequent and rather severe cough, especially at night. His tongue is foul, and pulse above 100. His bowels are somewhat loose, several thin yellow stools being passed daily.

The sound of percussion is impaired all over the right front, also from the axilla downwards laterally. Behind, percussion on the right side is less resonant than on the left, but not absolutely dull. The sound of respiration is somewhat harsh upon the right back, and upon the right front is dry and blowing, mingled with some sibilant rattles. The left side of the chest moves much more freely in inspiration than the right. The heart appears to beat in its natural situation; its sounds are heard with remarkable distinctness over the left, as contrasted with the right side. The left side of the chest, by measurement, is three-quarters of an inch larger than the right. The skin is harsh and dry; pulse 108; bowels regular.

May 6th, noon.—At six this morning he became affected with sudden and severe pain in the hypogastric region, and now the pain and tenderness of the belly are general, with more tumidity and tension than formerly. Has had three stools since the pain came on; is now breathing quickly, with some tracheal rattle and bronchitic thrills on the right front. There are several lymphatic glands considerably enlarged in both axillæ and right side of the neck. Pulse 126, scarcely perceptible at the wrist; extremities rather cold. He died eight hours and a half from the time when the pain occurred.

The body was examined on the 8th of May. It was much emaciated. A considerable quantity of turbid serum was found in the abdomen, with recent coagulable lymph in both iliac regions—in the basin of the pelvis, and on the upper surface of the liver. The subserous cellular membrane of the bowels, and of the parietes of the abdomen, was the seat of innumerable small whitish tubercles. The omentum was contracted on the colon, and filled with tubercular matter. The mesenteric glands were large, and most of them filled with tubercular matter. The right lung was at its apex, and in several parts near its surface, the seat of tubercular masses; the whole lung a good deal loaded with blood, and an ounce and a-half heavier than the left, which was not affected with tubercle, and not particularly



engorged. In a narrow, transverse, and old ulcer of the ileum, a perforation was found. Several of the patches were dark, elevated, and firm.

Bateman in his description of the tubercles notices the aperture as imperceptible. In all the cases I have seen, however, the aperture was very easily discerned in the larger mollusca with the naked eye; and, indeed, in many of them was of considerable size. With the aid of a common lens, the terminal opening was ascertained to exist even in the smallest and most recent of the tubercles which I examined—some of them less than a small pin's head,—so that we must look on it as an essential part of their structure, and not as the result of changes occurring at an advanced period of their growth. The existence of the aperture at the earliest stage of the tubercles, led me to suspect that they might probably be diseased follicles. On carefully inspecting a piece of skin which I had removed from the back, along with the large molluscum noticed in the case, I observed many of the delicate hairs emerging from minute eminences; and on examining these with a fine point, I could pick out a little semi-transparent mass from the follicle to which each hair belonged. It was doubtful whether these were mollusca in their earliest stage or not; and I therefore examined other larger bodies, with the unequivocal characters of the disease, and found a fine hair in the mass of one molluscum a little less, and of another a little larger, than an ordinary pin's head. In several tubercles of the common mature size, I searched in vain for the presence of a hair.

The first six figures in the plate represent the appearance of the tubercles as witnessed with the naked eye. The first figure shows the common size and form of the tubercles when fully developed. In the 2d and 3d Figures are represented the free and attached surfaces of a tubercle, consisting of three mollusca, each with its proper aperture, and separated throughout by what appeared like dense cellular laminae. The tubercles have an integument of epidermis, and underneath this an extremely delicate vascular layer, continuous with the surrounding *rete mucosum* and *cutis*. The vascularity is in many of the tubercles very apparent through the epidermis; and is further demonstrated by the quantity of blood which exudes when the surface is pricked with a lancet. The mass within this integument, or the disease, properly speaking, is loosely attached to the cutis and cellular membrane, except at one point—the aperture, where the adhesion is pretty firm.

In the 4th, 5th, and 6th Figures are exhibited three views of a small tubercle, separated from its dermoid investment. Figure 4 is a lateral view, showing the division into little lobules; Figure 5 is a view of the attached surface, the extremities of the lobules having been separated with the point of a pin; Figure 6 is a view of the aperture, within which there is a small common space or cavity, to which the cavities of the lobules converge. All the tubercles do not present so regular an appearance, as that which has been shown in these figures; pressure and different rates of growth in the several lobules effecting many diversities of form; but the general disposition of the parts is the same in all.

Figures 7, 8, 9, 10 are views of the structure and contents of the tubercles considerably magnified. Figure 7 represents a transverse

section of a portion of the wall of a tubercle. It shows the wall to consist of parallel cells projecting towards the interior cavity from an investing tegument or cyst of much delicacy. Within these parallel cells are exhibited small globular cells in considerable abundance, seen the most distinctly towards the inner extremities of the parallel cells. These globular cells are represented in Figure 8, as seen on the surface of the cavity of a tubercle; and in Figure 9 they are shown as escaping from ruptured parallel cells into the cavity. It is of these globular cells that the atheromatous matter which can be squeezed from the tubercles chiefly consists. Some of this matter is represented in Figure 10. The globules or cells vary in size, and contain nucleoli, some of which appear also in the fluid in a separate state. These cells are from the 1400th to the 3000th part of an inch in diameter.

Figure 11 is a sketch of the large molluscum on the back; Figure 12 gives a view of the opposite surface of this body—that which is in connection with the subcutaneous tissue. It had much of the general appearance of a conglomerate gland, and was easily separated into a multitude of little lobules. These were united by cellular tissue to one another, and the whole was invested in a dense tunic of cellular membrane; after removing this investment, the surface of the molluscum was found covered with a fine net-work of vessels which dipped into the interlobular spaces. Figure 13 represents the outer surface of the mass of lobules, and in this surface, as indicated by the letter *e*, is the point at which the aperture of this molluscum exists. This surface lay in immediate contact with the cutis, which was very thin towards the situation of the aperture, and allowed of a greater prominence at that place. A little dissection separated the mass into four divisions,—each composed of many lobules,—and all of these communicated with the aperture, from which they could be inflated by means of a blowpipe. This molluscum, therefore, illustrates on a larger scale the conformation of the smaller ones, composed as it is of many separate hollow processes communicating at one point with one another, and the external opening.

Figure 14 shows the appearance of some of the matter contained in this molluscum. The bodies indicated by the letter *a* appear to be globular cells which had burst. This was rendered probable by the side view of one of them as it turned over in crossing the field of the microscope suspended in a little water,—when it appeared flattened as at *b*, though previously of the shape of the figure beside it to the left. The greater part of the matter contained in this molluscum consisted of the debris of the cells, and nucleoli.

Figure 15 displays the appearance presented by a thin slice of the walls of this large molluscum, as seen through three lenses. The parallel cells are seen projecting from the common tunic,—and three minute bud-like bodies are shown as occupying the place of parallel cells that had been apparently cast off. Professor Reid, who had observed in a specimen of molluscum given him by Dr Paterson of Leith, what I have described as the parallel cells containing the globular, which subsequently in the former of atheroma constitutes the principal secretion of the tubercles, has suggested that, in this succession, there may be recognized an evidence of what Henle advances

respecting the manner in which the secretions in general are probably formed—to wit, in successive crops of cells sprouting from the membrane which yields the secretion. The above observations on the cells and secretion of the *molluscum contagiosum* certainly afford no inconsiderable presumption in favour of this supposition, when we consider that morbid phenomena are rather illustrations of, than exceptions to, the natural course of organic operations.

It is very probable, as Bateman has suggested, that the atheromatous secretion is the means by which the disease is propagated, yet inoculation with it in the ordinary way has not succeeded in the hands of Dr Paterson or in mine. If we are to consider the disease as peculiar to the follicles, it is easily understood how simple inoculation, without attention to the precise point at which the matter is inserted, so as to insure its contact with a follicle, should fail in propagating the tubercles.

The treatment of the tubercles, in order to cause their speedy removal, ought obviously to consist of measures calculated to excite them to inflammation. Dr Paterson informs me that he has readily effected this purpose by touching them with caustic potass; of course the earlier this is done in the progress of each the better. A fine point of nitrate of silver introduced into the aperture would doubtless effect the same end.



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*Plate IV, p. 212, Vol. LV*



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